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EXAMINER	
TRUONG, CAM Y T	
ART UNIT	PAPER NUMBER
2162	

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/020,483	CLAPPER, EDWARD O.	
	Examiner	Art Unit	
	Cam Y T Truong	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant has amended claims 1, 9, 17 and 25 in the amendment filed on 12/18/2004. Claims 1-30 are pending in this Office Action.

Applicant's arguments filed 12/8/2004have been fully considered but they are not persuasive.

Applicant argued that Higuchi does not explicitly teach the claimed limitation " modifying by the circuitry information accessible by the circuitry to indicate that the access has been granted to the second node, as modified by the circuitry, indicating a type of the access granted to the second node and the data subject to the access granted to the second node" as the message having the lock report and broadcast from the broadcast message exchange circuit 12 is transmitted to any one node having issued the lock request, the target node number "T#" in the message is sent to a coincidence judgment circuit 162 for comparison with the node number in the node number register 154 of the own node. If the comparison snows that the node in question is other than the resource managing node, no coincidence is detected. An AND gate 158 receives the inverted output of the coincidence judgment circuit 162 and a signal indicating that the command "C message D" in the message turns out to be a lock report when interpreted. Because each of the inputs is 1 for any other node than the resource managing node, the AND gate 158 outputs 1. The output of the AND gate 158 is input to the set terminal of the lock state register 153 via an OR gate 159. In the register 153, the value 1 is set to the bit location indicated by the bit number "B#" in

the above message. Thus the lock state register 153 in each of the nodes involved shows that the resource managing node is currently locked (steps 524 and 544). As described earlier, the resource managing node writes 1 to the same bit location as in the lock state register 153 when it grants any one lock request permission to lock its resource. The above information shows that the value 1 is changed or modified to indicate a type of the access granted to second node (col. 23, lines 1-25).

For the above reason, examiner believed that rejection of the last office action was proper.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6, 8-11, 14, 16-19, 22, 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Higuchi (US 6502136).

As to claim 1, Higuchi teaches the claimed limitations:

"determining by circuitry at a first node, in response, at least in part, to a first message received at the first node, whether to grant a second node access to data accessible by a third node" as a decoder in the input buffer 51interprets the command bit C message D. If the command is found to be a lock request, an AND age 155 is supplied with a signal indicating that the command when interpreted turned out to be a lock request. The other inverted input of the AND gate 155 is fed with the bit value representing the bit number B# from inside the lock state register 153. If the bit value is 0 i.e., where the resource managing node has yet to be locked, the output 155A of the AND gate 144 is 1. The output signal 155A, indicate that the lock request has granted. This means that the decoder of input buffer 51 determines whether to grant a node to access data from resource managing node. The input Buffer is represented as a first node. The request node is represented as a second node and the resource managing node is represented as third node (col. 22, lines 15-50);

"the first message comprising, at least in part, a request that the second node be granted the access to the data" as the access requesting node that received lock grant accesses the shared file and continues to perform retrieval (col.), lines 50-55);

"and if the circuitry determines to grant the access to the data: generating at and issuing from the circuitry a second message indicating, at least in part, that the access has been granted to the second node" as outputting a lock report in the form of a command to other node that the request node is granted to access the shard file (col. 22, lines 25-30); col. 1, lines 35-50).

"and modifying by the circuitry information accessible by the circuitry to indicate that the access has been granted to the second node, as modified by the circuitry, indicating a type of the access granted to the second node and the data subject to the access granted to the second node" as the message having the lock report and broadcast from the broadcast message exchange circuit 12 is transmitted to any one node having issued the lock request, the target node number "T#" in the message is sent to a coincidence judgment circuit 162 for comparison with the node number in the node number register 154 of the own node. If the comparison snows that the node in question is other than the resource managing node, no coincidence is detected. An AND gate 158 receives the inverted output of the coincidence judgment circuit 162 and a signal indicating that the command "C message D" in the message turns out to be a lock report when interpreted. Because each of the inputs is 1 for any other node than the resource managing node, the AND gate 158 outputs 1. The output of the AND gate 158 is input to the set terminal of the lock state register 153 via an OR gate 159. In the register 153, the value 1 is set to the bit location indicated by the bit number "B#" in the above message. Thus the lock state register 153 in each of the nodes involved shows that the resource managing node is currently locked (steps 524 and 544). As described earlier, the resource managing node writes 1 to the same bit location as in the lock state register 153 when it grants any one lock

request permission to lock its resource. The above information shows that the value 1 is changed or modified to indicate a type of the access granted to second node (col. 23, lines 1-25).

As to claims 2 and 18, Higuchi teaches the claimed limitation "determining by the circuitry whether the access is currently granted; and if the circuitry determines that the access is currently granted, queuing at the circuitry the request until the circuitry determines to grant the request" as (col. 22, lines 10-40).

As to claims 3 and 19, Higuchi teaches the claimed limitation "the determining by the circuitry whether the access is currently granted is based at least in part upon the information" as (col. 21, lines 5-25).

As to claims 6, 14 and 22, Huguchi teaches the claimed limitation "the second message is issued to the third node; and in response, at least in part, to the second message, the third node issues the data to the second node via a network route that by-passes at least one network segment that includes the first node" as (col. 14, lines 45-67).

As to claims 8, 16 and 24, Huguchi teaches the claimed limitation "the information includes lock information that indicates whether the access to the data has

been locked; and the circuitry determines whether to grant the access based, at least in part, upon the lock information" as (fig. 5B, col. 22, lines 60-65).

As to claim 9, Higuchi teaches the same claimed limitation in claim 1, Higuchi teaches the claimed limitations:

"circuitry at a first node, the circuitry being capable of determining, in response, at least in part, to a first message received by the circuitry, whether to grant a second node access to data accessible by a third node" as a decoder in the input buffer 51interprets the command bit C message D. If the command is found to be a lock request, an AND age 155 is supplied with a signal indicating that the command when interpreted turned out to be a lock request. The other inverted input of the AND gate 155 is fed with the bit value representing the bit number B# from inside the lock state register 153. If the bit value is 0 i.e., where the resource managing node has yet to be locked, the output 155A of the AND gate 144 is 1. The output signal 155A, indicate that the lock request has granted. This means that the decoder of input buffer 51 determines whether to grant a node to access data from resource managing node. The input Buffer is represented as a first node. The request node is represented as a second node and the resource managing node is represented as third node (col. 22, lines 15-50);

"the first message comprising, at least in part, a request that the second node be granted the access to the data" as the access requesting node that received lock grant accesses the shared file and continues to perform retrieval (col.6, lines 50-55);

"and if the circuitry determines to grant the access to the data, the circuitry also being capable of: generating at and issuing a second message indicating, at least in part, that the access has been granted to the second node" as outputting a lock report in the form of a command to other node that the request node is granted to access the shard file (col. 22, lines 25-30).

"modifying information accessible by the circuitry to indicate that the access has been granted to the second node" as the output signal 155A, indicating that the lock request has been granted permission to lock the target source (col. 22, lines 25-30).

As to claim 10, Higuchi teaches the claimed limitation "the circuitry is also capable of determining whether the access is currently granted; and if the first node determines that the access is currently granted, the circuitry is capable of queuing the request until the circuitry determines to grant the request" as (col. 22, lines 10-40).

As to claim 11, Higuchi teaches the claimed limitation "the circuitry is capable of determining whether the access is currently granted based at least in part upon the information" as (col. 21, lines 5-25).

As to claim 17, Higuchi teaches the same claimed limitation in claim 1, Higuchi teaches the claimed limitations:

"a storage medium having stored thereon instructions that when executed by a machine result in the following: determining by circuitry at a first node, in response, at

least in part, to a first message received at the first node, whether to grant a second node access to data accessible via a third node, the first message comprising, at least in part, a request that the second node be granted the access to the data" as (col. 22, lines 15-50; col. 7, lines 15-25);

"and if the circuitry determines to grant the access to the data: generating at and issuing from the circuitry a second message indicating, at least in part, that the access has been granted to the second node" as (col. 6 lines 50-55).

"modifying by the circuitry information accessible by the circuitry to indicate that the access has been granted to the second node". However, Higuchi teaches the output signal 155A, indicating that the lock request has been granted permission to lock the target source (col. 22, lines 25-30).

As to claim 25, Higuchi teaches the same claimed limitation in claim 1, except, Higuchi further teaches the claimed limitations:

"circuitry at a first node, the circuitry being coupled to at least one client node and to at least one server node, the circuitry being capable of determining, in response, at least in part, to a first message received by the circuitry, whether to grant the least one client node access to data accessible by the at least one server node" as (col. 22, lines 15-50; col. 6, lines 25-40);

" the first message comprising, at least in part, a request that the at least one client node be granted the access to the data" as (col. 6, lines 50-55);

" and if the circuitry determines to grant the access to the data, the circuitry also being capable of: generating at and issuing a second message indicating, at least in part, that the access has been granted to the at least one client node" as (col. 6, lines 25-30);

"modifying information accessible by the circuitry to indicate that the access has been granted to the at least one client node" as the output signal 155A, indicating that the lock request has been granted permission to lock the target source (col. 22, lines 25-30).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4, 5, 12, 13, 20, 21, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi (US 6502136) in view of Shun Chan (or hereinafter "Shun") (US 6697901).

As to claims 4, 12 and 20, Huguchi discloses the claimed limitation subject matter in claim 1, except the claimed limitation "the access requested by the request comprises at least one of a read of and a modification of the data". Shun teaches requesting modify a resource (col. 8, lines 35-36).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Shun's teaching of requesting modifying a resource to Huguchi's system in order to maintain resources for further processing.

As to claims 5, 13 and 21, Huguchi teaches the claimed limitation "and the method further comprises also modifying by the circuitry the information to indicate that the access has been exclusively granted to the second node" as (col. 2, lines 40-45). Huguchi does not explicitly teach the claimed limitation "the access requested by the request comprises modification of the data". Shun teaches requesting modify a resource (col. 8, lines 35-36).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Shun's teaching of requesting modifying a resource to Huguchi's system in order to maintain resources for further processing.

As to claim 26, Higuchi teaches "database storage accessible by the at least one server node comprises the data" as (col. 6, lines 25-40).

Higuchi does not explicitly teach the claimed limitation "the system further comprises a first network coupled to the at least one client node and a second network coupled to the at least one server node". Shun teaches local network and Internet (remove network) associated with client node and server node (fig. 5, col. 12, lines 40-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Shun's teaching of local network and Internet (remove network) associated with client node and server node to Higuchi's system to allow client nodes and server node can communicate with each other for accessing a share source.

As to claim 27, Higuchi discloses the claimed limitation subject matter in claim 25, except the claimed limitation "a first network segment coupling the first network to the second network; the first network segment comprises the circuitry; and the circuitry comprises a first processor coupled to the first network and a second processor coupled to the second network". Shun teaches a local network is coupling to the remove network by a circuitry (fig. 5, col. 12, lines 40-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Shun's teaching of a local network is coupling to the remove network by a circuitry to Higuchi's system in order to allow client nodes and server node can communicate with each other for accessing a share source without conflicting.

As to claim 28, Higuchi teaches the claimed limitation "respective input/output (I/O) processors" as (col. 18, lines 45-50).

As to claim 29, Higuchi teaches the claimed limitation "wherein: each of the server nodes is associated with respective database storage" as (fig. 4A).

As to claim 30, Higuchi discloses the claimed limitation subject matter in claim 25, except the claimed limitation "wherein: the circuitry comprises a first processor coupled to a first network, a second processor coupled to a second network, and a third processor coupled to storage". Shun teaches the circuitry of the system 500 includes a processor coupled to a local network and processor of the server is coupling to the remove network and the host processor is associated with database of the server (fig. 5, col. 12, lines 40-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Shun's teaching of the circuitry of the system 500 includes a processor coupled to a local network and processor of the server is coupling to the remove network and the host processor is associated with database of the server to Higuchi's system in order to allow client nodes and server node can communicate with each other for accessing a share source without conflicting.

6. Claims 7, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi (US 6502136) in view of Lomet (US 5596754).

As to claims 7, 15 and 23, Hug chi discloses the claimed limitation subject matter in claim 1, except the claimed limitation "the second message is issued to the second node; and in response, at least in part, to the second message, the second node issues

a modified version of the data to the third node via a network route that by-passes at least one network segment that includes the first node".

Lomet teaches updating version of a page (col.10, lines 45-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lomet's teaching of updating version of a page to Huguchi's system in order to store new information for future processing.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (703) 605-1169. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Y Truong

3/25/2005

SHAHID ALAM
PRIMARY EXAMINER